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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE: AUG 01 1991

SUBJECT: ON-SCENE COORDINATOR'S REPORT - Removal Action at Dayton Tire and Rubber Site, Phase I (Site ID #9A)

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Attached is the On-Scene Coordinator's (OSC) Report for Phase I of the removal action conducted at the Dayton Tire and Rubber site in Dayton, Ohio. The report follows the format outlined in the National Contingency Plan (NCP), Section 300.165. This phase of the removal was initiated on April 4, 1987, and continued through September 29, 1987. The OSC on this phase of the removal action was Robert W. Bowlus.

The site posed an imminent threat to human health and the environment. The action was taken to mitigate threats posed by the uncontrolled release of PCBs to the environment.

Costs for this phase under the control of the OSC totaled \$585,508.91, of which \$451,930.91 was for the Emergency Response Cleanup Services contractor. Note that this particular action was Phase I of removal activities.

Any indication in this OSC Report of specific costs incurred at the site is only an approximation, subject to audit and final definitization by the U.S. EPA. The OSC Report is not a final reconciliation of the costs associated with a particular site.

Portions of the OSC Report appendices may contain confidential business or enforcement-sensitive information and must be reviewed by the Office of Regional Counsel prior to release to the public.

This site is not on the National Priorities List.

Attachment

cc: K. Schultz, Ohio EPA, w/OSC Report
T. Johnson, HQ U.S. EPA, OERR, OS-210, w/OSC Report

bcc: T. Lesser, 5PA-14, w/OSC Report
R. Freeman, 5RA-14, w/OSC Report
T. Williams, 5CS-TUB-3, w/OSC Report
J. Connell, 5SPT, w/OSC Report
R. Bowden, 5HS-12, w/OSC Report
P. Schafer, 5HS-11, w/OSC Report
R. Powers/R. Buckley, 5HSGI, w/OSC Report
R. Bowlus, 5HSGI, w/OSC Report
ESS Reports Coordinator, 5HS-12, w/OSC Report
R. Mayhugh, 5HS-TUB-6, w/20 copies OSC Report
B. Ramsey, Secretary, NRT, OS-120, w/OSC Report
EERB Site File, 5HS-12, w/OSC Report (5)

ON-SCENE COORDINATOR'S REPORT

CERCLA REMOVAL ACTION

DAYTON TIRE & RUBBER, PHASE I

DAYTON, OHIO

SITE ID #9A

DELIVERY ORDER NO. 6894-05-089

Removal Dates: April 4, 1987 - September 29, 1987

Robert W. Bowlus
On-Scene Coordinator
Emergency and Enforcement Response Branch
Office of Superfund
Waste Management Division
Region V
United States Environmental Protection Agency

EXECUTIVE SUMMARY

Site/Location: Dayton Tire and Rubber site, Phase I, Dayton, Ohio
Removal Dates: April 4, 1987 - September 29, 1987

INCIDENT DESCRIPTION

This site was an abandoned tire-making facility located within a mixed residential, commercial and industrial area. The removal action was taken to mitigate the threats to public health and the environment posed by the presence of polychlorinated biphenyls (PCBs). These materials posed threats through direct contact, potential contamination of drinking water, and high levels of PCBs in the soils at or near the surface that might migrate, and the threat of fire or explosion. Hazardous substances in drums, tubs, and vats were also discovered at the site and posed a threat of release.

ACTIONS TAKEN

The U.S. EPA began Phase I of the removal action on April 4, 1987. The following emergency removal activities were performed: all PCB oil was barreled and securely stored on site, the outflow of PCB oil through the storm drain system was plugged and the storm water rerouted, and the contaminated sediment from the Miami River and Wolf Creek was excavated and stored on site.

All actions taken were consistent with the National Contingency Plan. This was a time-critical removal action.

Phase I of the removal was completed on September 29, 1987, at an estimated cost under control of the OSC of \$585,508.91, of which \$451,930.91 was for the Emergency Response Cleanup Services contractor. The Phase I On-Scene Coordinator was Robert W. Bowlus.

Robert W. Bowlus July 25 1987
Robert W. Bowlus, On-Scene Coordinator Date
Emergency and Enforcement Response Branch
United States Environmental Protection Agency
Region V

TABLE OF CONTENTS

DAYTON TIRE & RUBBER, PHASE I DAYTON, OHIO

	<u>Page</u>
EXECUTIVE SUMMARY.....	i
List of Figures.....	iii
List of Tables.....	iii
List of Appendices.....	iv
 1.0 SUMMARY OF EVENTS.....	 1
1.1 Location/Initial Situation.....	1
1.2 Previous Actions or Site History.....	1
1.3 Threats to Public Health and the Environment.....	6
1.4 Attempts to Obtain a Response by PRPs.....	7
1.5 Federal Cleanup Action.....	7
1.5.1 Safety and Support Facilities.....	7
1.5.2 Site Investigation.....	8
1.5.3 Storm Outfall Monitoring.....	9
1.5.4 Excavation of Storm Drain/Plugging of Outfall Pipe.....	9
1.5.5 Sealing of Roof Drains.....	9
1.5.6 Drain System Investigation.....	9
1.5.7 Storage of PCB-Contaminated Debris.....	10
1.5.8 Transformer/Capacitor Oil Removal.....	10
1.5.9 Storage of PCB-Contaminated Oil/Water.....	10
1.5.10 PCB-Contaminated Oil Spill Building Cleanup.....	10
1.5.11 Wolf Creek Sediment Excavation.....	10
1.5.12 Demobilization.....	11
1.6 Community Relations.....	11
1.7 Cost Summary.....	12
 2.0 EFFECTIVENESS OF THE REMOVAL ACTION.....	 12
2.1 Responsible Parties.....	12
2.2 State and Local Agencies.....	12
2.3 Federal Agencies and Special Teams.....	12
2.4 Contractors and Others.....	12
 3.0 PROBLEMS ENCOUNTERED.....	 12
 4.0 OSC RECOMMENDATIONS.....	 14

LIST OF FIGURES

DAYTON TIRE & RUBBER, PHASE I
DAYTON, OHIO

<u>Figure</u>	<u>Page</u>
1 Site Location Map.....	2
2 Site Map.....	3
3 Building Diagram.....	4

LIST OF TABLES

DAYTON TIRE & RUBBER, PHASE I
DAYTON, OHIO

<u>Table</u>	<u>Page</u>
1 Summary of Estimated Costs.....	13
2 Time Line of Activities.....	15-17

LIST OF APPENDICES
DAYTON TIRE & RUBBER, PHASE I
DAYTON, OHIO

Appendix

- A - ACTION MEMORANDA
- B - ADMINISTRATIVE ORDER
- C - DELIVERY ORDER
- D - TDDs FOR TAT
- E - POLREPS
- F - SITE SAFETY PLAN
- G - CORRESPONDENCE
- H - EXTENT-OF-CONTAMINATION INVESTIGATIONS
- I - COMMUNITY RELATIONS
- J - NEWS ARTICLES
- K - SITE PHOTOGRAPHS
- L - WORK ORDERS
- M - WORK REPORTS
- N - SITE ENTRY/EXIT LOG & SITE SECURITY REPORTS
- O - HOT ZONE ENTRY/EXIT LOG
- P - MATERIALS LOG
- Q - EQUIPMENT LOG
- R - SUBCONTRACTOR LOG
- S - TAT COSTS
- T - INCIDENT OBLIGATION LOG
- U - 1900-55 FORMS
- V - SITE MAPS
- W - SITE LOG
- X - PEI INVOICES
- Y - PRP CORRESPONDENCE
- Z - PRP DOCUMENTATION
- AA - PHONE CONVERSATION RECORD

NOTE: Portions of these appendices may contain confidential business or enforcement-sensitive information and should be reviewed by the Office of Regional Counsel prior to release to the public.

1.0 SUMMARY OF EVENTS

1.1 Location/Initial Situation

Dayton Tire and Rubber Company (DTR) is located at 2347 Riverview Avenue, Dayton, Montgomery County, Ohio (Figure 1). The 37-acre site is adjacent to Wolf Creek, 1.25 miles upstream from the confluence of the Great Miami River and Wolf Creek. The site is located within a mixed residential, commercial, and industrial area. The site is bounded to the north and west by residential areas, to the south by Wolf Creek and to the east by light commercial and industrial development (Figure 2). The main DTR building is approximately 1,000 feet long and 500 feet wide with two primary levels and numerous mezzanine areas. A basement underlies the entire building with the exception of a few areas. Structures on the site that are not part of the main building include service buildings, aboveground tanks, carbon black storage units, sump houses, and electrical stations (see Figure 3). The topography of the site is relatively flat with the exception of an abandoned railroad spur on site and steep banks along Wolf Creek. According to the City of Dayton, the south end of the Dayton Tire property is located over the former Wolf Creek stream bed which was landfilled prior to initial construction of the facility. Both Wolf Creek and the Dayton Tire property lie over the Great Miami aquifer. Local drinking water supplies, however, are not drawn from private well systems. The City of Dayton municipal well field is located approximately 7 miles southwest of the site.

1.2 Previous Actions, or Site History

From the early 1940s to 1980, DTR produced automotive tires and an array of other rubber products. The manufacturing process used acids and mixtures of xylene, toluene, and benzene. Other chemicals used include alcohols and formaldehyde. Firestone Tire and Rubber Company (Firestone) purchased DTR in the mid-1970s. The former DTR plant was then operated as a division of Firestone until the plant closed in 1980. At the time Firestone purchased the DTR plant, the company also purchased land across the street on Rosedale Avenue. Firestone eventually built a distribution facility on this land. The distribution facility is currently operational. In July 1981, after it had closed the former DTR plant, Firestone sold the plant to J.V. Properties, a real estate brokerage firm. From the time the property was sold to J.V. Properties until early in 1987, a local salvage firm salvaged copper from the large amounts of electrical equipment that remained in the building. During the salvaging process, the property was vandalized and polychlorinated biphenyl-(PCB) contaminated oil from many of the transformers was released. The released oil entered floor drains in the building and eventually migrated through a sump located on the south side of the building into Wolf Creek via a storm outfall pipe (Figure 2).

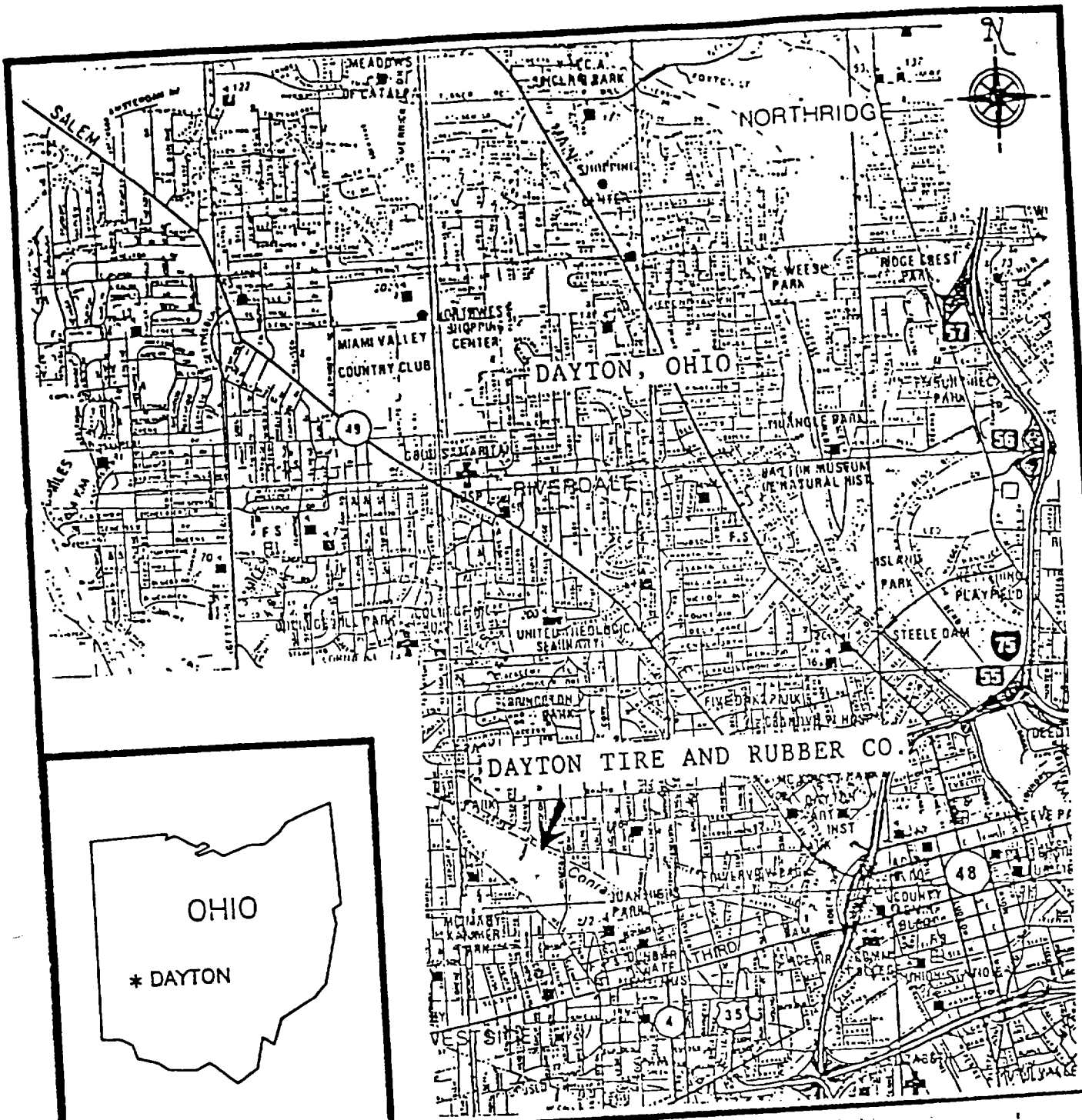
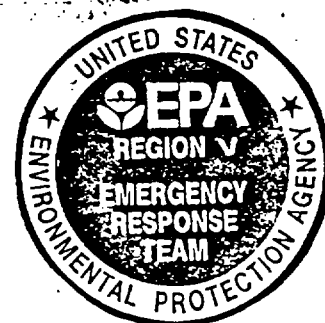
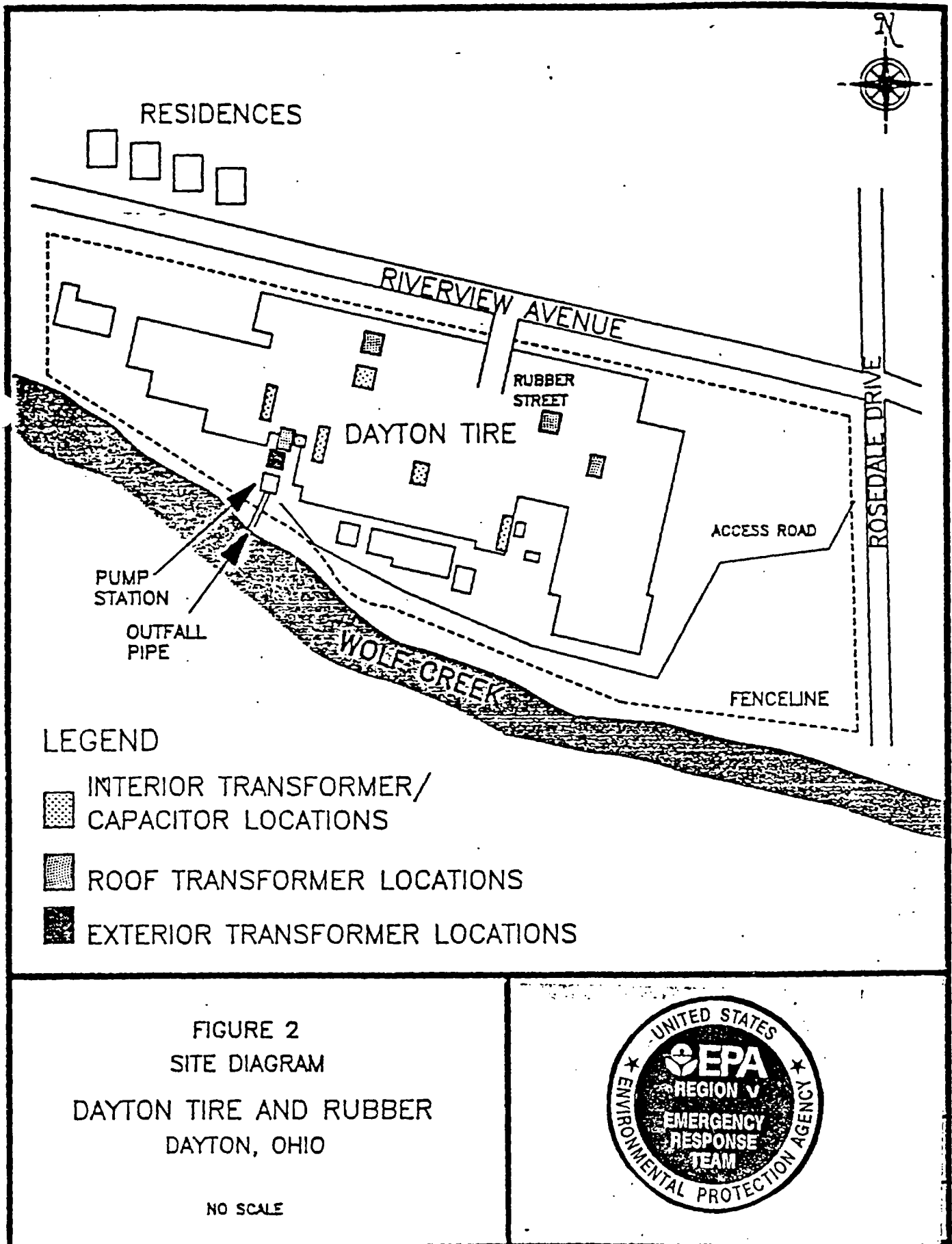
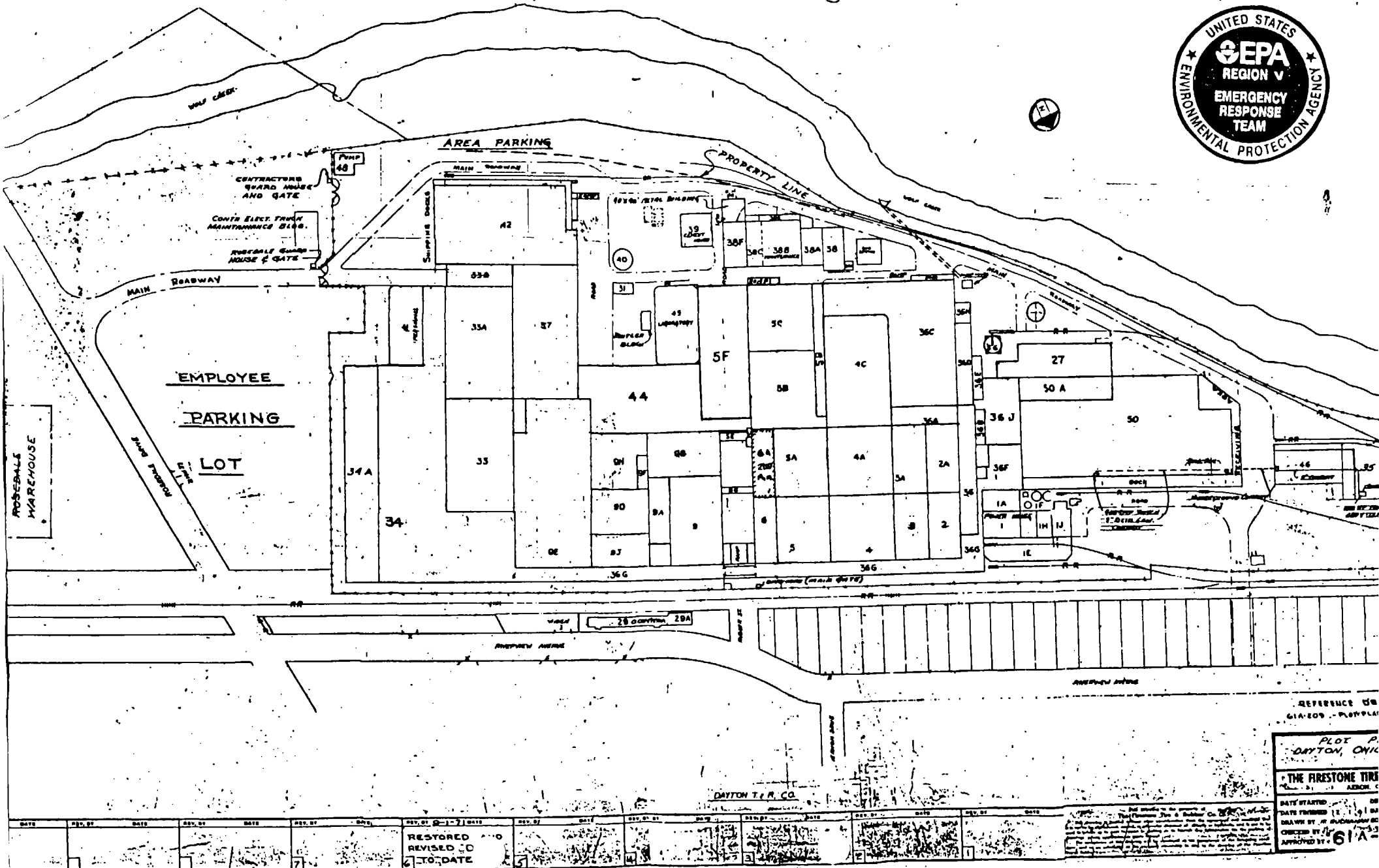


FIGURE 1
SITE LOCATION MAP
DAYTON TIRE AND RUBBER
DAYTON, OHIO

NOT TO SCALE







On April 3, 1987, a City of Dayton Parks and Recreation employee reported an oil sheen on Wolf Creek. The Ohio Environmental Protection Agency (OEPA) On-Scene Coordinator (OSC) James Crawford investigated the reported spill and discovered oil discharging from the storm drain outfall pipe located on the south end of the former DTR property. The OEPA contracted Leston Sewer Company to contain the spill. Leston placed booms upstream of the confluence of Wolf Creek and the Great Miami River and mobilized a vacuum truck in an attempt to intercept oil at the storm drain outfall. A sample of the oil from the pipe was collected by the OEPA, analyzed, and found to contain 22,900 parts per million (ppm) of PCBs. On the evening of April 3, 1987, the OEPA requested assistance from the U.S. Environmental Protection Agency (U.S. EPA). U.S. EPA OSC Robert Bowlus and Technical Assistance Team (TAT) member Kathy Nobles arrived at the site to assist the OEPA.

On April 4, 1987, representatives from the OEPA met with OSC Bowlus to brief him on the actions conducted at the site. The OEPA requested that the U.S. EPA act as the lead agency for the emergency response. Because of the extensive costs and budget limitations associated with mitigating the oil release, the U.S. EPA accepted the lead agency role in the removal action.

Throughout the U.S. EPA involvement, the OEPA continued to assist the U.S. EPA with the site investigation, sampling, permit approval, and/or waiver and information gathering for a PRP search.

The City of Dayton also became actively involved in the site following the initial emergency response. Representatives from the city met with OSC Bowlus on April 5, 1987, to discuss the U.S. EPA proposed actions at the DTR site. The City of Dayton representatives were concerned about the threats posed by the abandoned site. They were not, however, willing to provide the U.S. EPA with resources to mitigate the threats. The city did assist the U.S. EPA in expediting hookup of utilities for the cleanup and in the cleanup of Wolf Creek. Throughout the removal action the assistant city manager, as well as other concerned representatives, kept in close contact with the U.S. EPA to monitor progress at the site and to request that more stringent cleanup standards be imposed.

The Regional Air Pollution Control Agency (RAPCA), a division of the Ohio Department of Health (ODH), assisted the U.S. EPA in inspecting the facility for asbestos. RAPCA collected ten bulk asbestos samples for analysis. The analytical results of their sampling aided the U.S. EPA in estimating the extent of asbestos contamination in the building. RAPCA continued to provide the U.S. EPA with general guidance on asbestos health threats and mitigative techniques.

The Combined Health Districts of Montgomery County (CHDMC) and the ODH held a press conference on May 8, 1987, to announce a public health advisory for a 3-mile reach of Wolf Creek and the Great Miami River, prohibiting swimming, fishing, and other water sports. They issued the advisory after high concentrations of PCBs were detected in fish

collected downstream of the DTR site. Following this announcement, the CHDMC, in conjunction with the City of Dayton, posted warning signs along the 3 miles of affected waterways. The ban on affected waterways remained until additional fish tissue sampling conducted by the OEPA indicated that a health threat no longer existed.

1.3 Threats to Public Health and the Environment

The presence of hazardous materials at the abandoned site and the uncontrolled release of PCB-contaminated oil into an adjacent waterway presented an imminent threat to human health and the environment as outlined in Section 300.65(b)(2) of the National Contingency Plan. The threats posed by the site included the following:

- a. Actual or potential exposure to hazardous substances or pollutants or contaminants by nearby populations, animals, or food chain.
- b. Actual or potential contamination of drinking water supplies or sensitive ecosystems.
- c. Hazardous substances or pollutants or contaminants in drums, barrels, tanks, or other bulk storage containers, that may pose a threat of release.
- d. High levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface, that may migrate.
- e. Threat of fire or explosion.

The U.S. EPA considered the large pools of highly concentrated PCB-contaminated oil found both in the plant and on the site outside the plant as the most serious threat. The samples of PCB-contaminated oil the TAT collected at transformer stations on the site contained PCB concentrations as high as 1,000,000 parts per million (ppm). The transformer stations that were vandalized were open sources of contamination. Because the oil could migrate through storm drains into Wolf Creek, nearby populations, animals, or the food chain could be exposed. Also, nearby residents could easily enter the unsecured site and be exposed to the PCBs. Since the suspected cause of the initial oil releases was illicit salvaging of electrical equipment in the plant for valuable copper, individuals could presumably continue salvaging in the future thereby endangering those individuals, as well as others, if the equipment were removed from the property and resold. Other sources of uncharacterized chemicals, such as open drums of liquids, and open-topped buried tanks, numerous floor pits, and vats containing liquids, were present within the plant. These chemicals were presumably used in the manufacture of rubber products and were suspected to be flammable solvents, muriatic acid, and formaldehyde. The high possibility of structural failure of parts of the building added to the threat of release of these chemicals.

1.4 Attempts to Obtain a Response by PRPs

In July 1981, a partner of J.V. Properties, Machinery Merchants, Inc., was allegedly interested in selling the tire-making equipment remaining within the facility. These parties, as well as the local salvage company and Firestone, were named by the U.S. EPA as potentially responsible parties (PRPs) for a PCB release from DTR.

PRPs, Firestone; J.V. Properties; Machinery Merchants International, Inc.; and the local salvage companies were served an administrative order under Section 106 of CERCLA requesting them to conduct the cleanup at the facility; however, all responses to the order were negative. The U.S. EPA is continuing its efforts to determine whether a viable PRP can be located. To date, liability has been difficult to establish. In the interim, the U.S. EPA is continuing with cleanup actions at the site.

1.5 Actions Taken

On April 4, 1987, OSC Bowlus met with OEPA OSC James Crawford, TAT member Nobles, and Response Manager (RM) Paul Street of OH Materials (OHM) to discuss the U.S. EPA involvement in the spill mitigation and to plan mitigation actions. The U.S. EPA assumed the lead role in the spill response, since the OEPA had already exceeded its authorized spill response budget of \$10,000 for the stabilization efforts. Initially, the U.S. EPA had allocated \$40,000 under the provisions of the Superfund Amendments and Reauthorization Act (SARA) of the Comprehensive Environmental Response Compensation and Liability Act (CERCLA). The U.S. EPA granted ceiling increases above this amount on April 7, 1987 (\$10,000), April 15, 1987 (\$40,000), April 17, 1987 (\$200,000), and July 6, 1987 (\$516,000). Zone 3 Emergency Response Cleanup Services (ERCS) contractor, PEI Associates, Cincinnati, Ohio, led the Phase I removal at the DTR site. OHM of Findlay, Ohio, acting as a subcontractor to PEI, completed the on-site cleanup/stabilization action.

1.5.1 Safety and Support Facilities

On April 4, 1987, OSC Bowlus, RM Street, and TAT member Nobles met to discuss site safety procedures. The OSC adopted the TAT site safety plan. On April 6, 1987, because of unrestricted access, the U.S. EPA secured Wells Fargo Company to provide site security. Initially, site security was ordered on a limited basis to maintain site control during the emergency response. On April 14, 1987, following an unanticipated second PCB-contaminated oil release from the site, the OSC directed PEI Associates to mobilize with all necessary equipment to contain the spill. On April 18, 1987, the U.S. EPA ordered round-the-clock site security for the duration of the removal action. On April 21, 1987, the U.S. EPA and ERCS contractor command post, including office trailer, telephone and electrical utilities, was set up.

1.5.2 Site Investigation

Beginning on April 4, 1987, the TAT and the OSC conducted a site investigation concurrent with the removal action. This assessment was the basis for a Removal Action Plan (RAP) prepared by the TAT. This investigation revealed the following:

- a. The security fence surrounding the property was extensively damaged, and trespassing by local residents was common. The abandoned facility was readily accessible through open doorways and windows.
- b. The source of the PCB-contaminated oil flowing into Wolf Creek was from transformers located in the facility that had been vandalized; oils in the transformers had spilled or been released into floor drains. During the initial assessment, the OSC and TAT observed 35 transformers on the site. Of the 35 transformers, approximately 18 had been vandalized and/or emptied.
- c. Pools of PCB-contaminated oil from transformer spills were observed in scattered areas throughout the site. The highest concentration of PCB-contaminated oil documented in a spill area was 1,000,000 ppm. This spill area was located in the basement of the facility and was subject to frequent inundation during periods of heavy rainfall. Water on the floor of the facility ranged in depth from 0 to 4 inches.
- d. PCB-contaminated, oil-filled capacitors were located in two switch rooms on the first floor of the facility. Additionally, other capacitors and PCB-contaminated, oil-filled switches were located in mezzanine and basement areas of the building.
- e. Approximately one hundred 55-gallon drums of uncharacterized materials were observed throughout the facility. Many of the drums contained dried paint, although some of the drums contained liquids.
- f. Two large floor pits, four small plating vats, and a series of oil separation reservoirs all containing liquids were located in the basement of the facility.
- g. Approximately 25 to 45 bottles of various chemicals were observed in a laboratory room and in a chemical mixing room.
- h. The TAT conducted air monitoring inside and outside the facility at various times during the duration of the site cleanup. The TAT used an organic vapor analyzer (OVA) and combustible gas indicator (CGI). All readings were below background levels, including the areas around uncharacterized drums.

- i. Analytical results of samples collected by RAPCA verified the presence of friable asbestos throughout the facility. An estimation of the number of asbestos-wrapped pipes was not possible because of the magnitude of the piping systems throughout the building, in addition to large asbestos-covered boilers and cooling towers. A significant amount of these asbestos-containing materials was damaged or lying loose on the building floor surfaces.
- j. Soils located on the site near an outdoor transformer area were sampled and documented to be contaminated with PCBs in excess of 1,000 ppm.
- k. Sediments within Wolf Creek, downstream of the storm outfall pipe at the former DTR, were sampled and noted to be contaminated with PCBs. Background samples collected indicated that no PCB contamination was present upstream of the site.

1.5.3 Storm Outfall Monitoring

Beginning on April 4, 1987, and continuing through April 23, 1987, OHM monitored the facility storm outfall pipe on Wolf Creek for oil releases. As part of the monitoring, a vacuum truck was used to intercept oil discharges before they could enter Wolf Creek. OHM placed sorbent booms across Wolf Creek downstream of the outfall to prevent any further contamination downstream. A siphon dam was also constructed at the outfall.

1.5.4 Excavation of Storm Drain/Plugging of Outfall Pipe

From April 17 to 19, 1987, following the second oil release, the storm outfall pipe leading from the DTR site to Wolf Creek was excavated, severed, and plugged. No further oil releases occurred following this action. The sorbent booms and siphon dam were left in place as a precaution until the site was demobilized in May 1987.

1.5.5 Sealing of Roof Drains

From April 20 through May 1, 1987, drains on the roof of the facility were plugged to prevent the accumulation of rainwater in the interior of the building. Water drainage for the roof was rerouted to the north side of the building.

1.5.6 Drain System Investigation

Beginning on April 14, 1987, a drain system investigation was initiated to determine the route(s) of PCB-contaminated oil releases throughout the facility and the extent of drain system contamination from PCB-contaminated oil. On April 16, 1987, a smoke test of the drains inside the facility was conducted to determine which drain lines had a connection to the storm outfall pipe. On May 7, 1987, OHM conducted a smoke and a dye test of drain lines inside a transformer vault located

in the basement of the medical building. The test verified that the drain had a direct connection to the sump house and outfall pipe. Between April 23 and April 28, 1987, the TAT collected seven samples from manholes and drain plugs inside the facility to determine if the lines contained PCB-contaminated oil.

1.5.7 Storage of PCB-Contaminated Debris

On April 20, 1987, OHM began removing PCB-contaminated debris from oil spill areas to facilitate the clean-up effort. The debris consisted of metal bands and parts from transformer carcasses. The debris was staged on visqueen at centrally located areas of the building.

1.5.8 Transformer/Capacitor Oil Removal

To prevent further oil releases, all oil remaining inside transformers and capacitors was drained. The pumping began on April 20, 1987, and continued through May 13, 1987. Oil from a total of ten transformers and six capacitors was pumped into labeled drums and staged in a storage building located on the site.

1.5.9 Storage of PCB-Contaminated Oil/Water

The PCB-contaminated oil discharging from the storm outfall to Wolf Creek was stored in 55-gallon drums until a 10,000-gallon pool was set up in a storage building to serve as an oil/water separation system.

1.5.10 PCB-Contaminated Oil Spill Building Cleanup

On April 20, 1987, OHM began collecting PCB-contaminated oil that was believed to have been released from transformers by vandals. Ten areas, including five exterior transformer stations, contained standing pools of PCB-contaminated oil. The oil was collected by using a skid vacuum and/or diaphragm pump and then pumped into 55-gallon drums and stored on the site. The TAT sampled the oil pools while the removal action was in progress. Analytical results of the sampling were used to determine the possible source(s) of PCB-contaminated oil and to gather information for disposal of the oil.

1.5.11 Wolf Creek Sediment Excavation

In April, May, and July 1987, the TAT and the OEPA collected sediment samples in Wolf Creek and the Great Miami River. Analytical results of sampling indicated high concentrations of PCBs in the sediment. On July 28, 1987, the U.S. EPA began removing PCB-contaminated sediments downstream of the DTR site. OHM began the excavation at the storm outfall pipe located on the south side of the DTR site and continued moving downstream to the areas identified as contaminated by the sampling. The sediment excavation continued through August 5, 1987. The TAT and the OEPA conducted additional sampling to verify that the contaminated sediments had been removed. The contaminated soils were staged on visqueen in a small service building located on the east side

of the property. The soils would be disposed of as part of a site-specific contract planned for further remediation of the site.

1.5.12 Demobilization

The following tasks were performed between May 8 and May 14, 1987 to prepare for site demobilization:

- a. Cleanup of debris in the support zone and decontamination areas;
- b. Disconnection of power and telephone service to the contractor's trailer;
- c. Securing of storage building;
- d. Demarcation of building entrances with PCB and asbestos warning stickers and tape;
- e. Boarding up of windows adjacent to an area highly contaminated with damaged friable asbestos;
- f. Continuation of 24-hour site security;
- g. Decontamination/demobilization of equipment; and
- h. Repair of all holes in the perimeter fence.

1.6 Community Relations

Throughout the removal action, the U.S. EPA worked closely with state and local organizations and the press in an effort to provide information about the cleanup to the community. Local organizations were active in arranging public meetings. Though residents did not form a site-specific interest/activist group, the City of Dayton organized bimonthly neighborhood meetings. One of the main topics at these meetings was the importance of observing the fishing and swimming ban placed on the affected waterways. U.S. EPA representatives did not attend neighborhood meetings; however, U.S. EPA OSC Bowlus, U.S. EPA Community Relations Coordinator (CRC) Bill Reynolds, and TAT members attended numerous meetings with city officials during cleanup at the site. On April 24, 1987, a Regional Response Team (RRT) meeting was held in Dayton to establish a forum whereby the concerned agencies could provide input into the project and to coordinate Federal, State and local efforts directed at the site cleanup. The U.S. EPA was an active participant in these meetings. Another major avenue for information dissemination was the local media. Immediately following the spill, the local media informed the community about health issues and actions taken by all levels of government. The U.S. EPA invited the press to the site approximately three times so reporters could make observations and take photographs of the cleanup progress. Representatives of the City of Dayton and the OEPA were on the site daily; much of the information that was passed to the press came through City of Dayton officials.

OSC Bowlus and CRC Reynolds held press conferences. Also, the U.S. EPA posted copies of press releases near the site so the local residents could obtain copies.

1.7 Cost Summary

PEI Associates was the prime cleanup contractor. OHM was the prime subcontractor. Phase I site activity began on April 4, 1987, and continued through September 29, 1987. The total daily expenditures for services provided by the ERCS contractor directly, or by a subcontractor, totaled \$451,930.91. Table 1 summarizes a breakdown of these expenditures. Total project funds expended by the ERCS contractor, U.S. EPA, and TAT through February 23, 1988, totaled \$585,508.91.

These costs are estimated, subject to audit and final definitization by the U.S. EPA. The OSC Report is not intended to be a final reconciliation of all costs associated with a particular site.

2.0 EFFECTIVENESS OF REMOVAL ACTION

2.1 Responsible Parties

As discussed in Section 1.4, identified PRPs did not conduct or participate in the removal activities and thus were ineffective.

2.2 State and Local Agencies

As discussed in Section 1.2, state and local officials responded to a spill at the Dayton Tire site prior to the U.S. EPA involvement and remained active in the site activities throughout the U.S. EPA mitigative actions.

2.3 Federal Agencies and Special Teams

The U.S. EPA was the only Federal Agency involved in the Dayton Tire site cleanup. Actions taken by U.S. EPA mitigated the threats discussed in Section 1.3.

2.4 Contractors and Others

The ERCS Contractor, PEI, was effective on site and cost conscious.

3.0 PROBLEMS ENCOUNTERED

Cleanup actions were hampered by the spread of the PCB-contaminated oil on the floor during periods of heavy rain when the interior of the building was flooded. In addition, the floor drains were repeatedly contaminated as the water moved through the drain system. Determination of the specific source of PCB contamination and the route the oil flowed through the building and into the storm drain was difficult because of

TABLE 1

SUMMARY OF TOTAL ESTIMATED REMOVAL COSTS
DAYTON TIRE AND RUBBER PHASE I
DAYTON, OHIO
8/7/87 - 12/30/87

EXTRAMURAL COSTS:

ERCS Contractor (1)	\$ 451,930.91
Labor	183,246.80
Equipment	87,370.80
Materials	25,311.68
Analysis	45,921.36
Disposal	40,666.05
Subcontractor	67,131.48
TAT Contractor	<u>90,171.00</u>
Subtotal	\$ 542,101.91

INTRAMURAL COSTS:

U.S. EPA, OSC (2)	<u>43,407.00</u>
Subtotal	43,407.00
	=====
ESTIMATED TOTAL PROJECT COSTS	\$ 585,508.91
PROJECT CEILING	\$ 806,000.00

- (1) Source: ERCS Contractor Cost Summary Report.
- (2) Source: U.S. EPA costs are taken from cost tracking conducted on the site during the removal.

Any indication of specific costs incurred at the site is only an approximation, subject to audit and final definitization by the U.S. EPA. The OSC Report is not meant to be a final reconciliation of the costs associated with a particular site.

the extensive drain system in the building. Once blueprints of the building's draining system were obtained, the U.S. EPA was able to pinpoint which PCB-contaminated pools needed to be removed first and which drains needed to be plugged. Plugging the drains was necessary to avoid subsequent PCB-contaminated oil releases. Damaged asbestos-containing materials, observed strewn on the floors throughout the building, delayed cleanup activities until the level of respiratory protection needed for contractor personnel could be determined.

4.0 OSC RECOMMENDATIONS

States should be encouraged to enact legislation requiring an environmental audit of facilities with a specific SIC code, size, or tax value prior to sale or at some other appropriate juncture.

DAYTON TIRE AND RUBBER
TIME LINE OF EVENTS
(APRIL 4, 1987 - SEPTEMBER 29, 1987)

[illegible]

TIME LINE OF EVENTS
(APRIL 4, 1987 - SEPTEMBER 29, 1987)

ACTIVITY	MAY														JUNE		JULY																								
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	1-7	1-15	16-20	21	22	23	24	25	26	27	28	29	30	31													
Site safety and support	↑	-----																																							
Mobilization	↑																					-----																			
Storm outfall monitoring	↑																																								
Wolf Creek/Great Miami River sampling	↑					---														-----				-----																	
Excavation of storm drain/ plugging of outfall	↑																																								
Drain system investigation	↑	---												-----																											
Storage of contaminated debris	↑					--				-----																															
PCB oil spill removal from building	↑					-----																																			
Transformer removal	↑					-----				-----																															
Sealing of roof drains	↑	---																																							
Building sampling	↑	---								--		-----																													
Oil/water separation	↑					-----																																			
Water treatment	↑																															-----									
Fence repair	↑																					-----										-----									
Wolf Creek sediment excavation	↑																															-----									
Demobilization	↑	--										-----																													

(APRIL 4, 1987 - SEPTEMBER 29, 1987)

ACTIVITY	AUGUST																SEPTEMBER	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16-31	1-29	
Site safety and support	1																	
Mobilization	1																	
Storm outfall monitoring	1																	
Wolf Creek/Great Miami River sampling	1																	
Excavation of storm drain/ plugging of outfall	1																	
Drain system investigation	1																	
Storage of contaminated debris	1																	
PCB oil spill removal from building	1																	
Transformer removal	1																	
Sealing of roof drains	1																	
Building sampling	1																	
Oil/water separation	1																	
Water treatment	1																	
Fence repair	1																	
Wolf Creek sediment excavation	1																	
Demobilization	1																	

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